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RESEARCH ARTICLE

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Notulae to the Italian native vascular flora: 12

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Abstract

In this contribution, new data concerning the distribution of native vascular flora in Italy are presented. It includes new records, confirmations, exclusions, and status changes to the Italian administrative regions. Nomenclatural and distribution updates, published elsewhere, and corrigenda are provided as Suppl. material 1.

Keywords

Endemic taxa, Floristic data, Italy

How to contribute

The text for the new records should be submitted electronically to Lorenzo Lastrucci (lorenzo.lastrucci@unifi.it). The corresponding specimen along with its scan or photograph have to be sent to FI Herbarium: Sezione di Botanica "Filippo Parlatore" del Museo di Storia Naturale, Via G. La Pira 4, 50121 Firenze (Italy). Those texts concerning nomenclatural novelties (typifications only for accepted names), status changes, exclusions, and confirmations should be submitted electronically to: Fabrizio Bartolucci (fabrizio.bartolucci@gmail.com). Each text should be within 1,000 characters (spaces included).

Floristic records of native taxa

Acanthus spinosus L. (Acanthaceae)

+ **CAL**: Cirò (Crotone), loc. Favare, 550 m a sud della centrale (WGS84: 39.37787N, 17.04018E), boscaglia mediterranea, argilloso, 280 m, 13 October 2019, *G. De Fine* (CLU). – Species new for the flora of Calabria.

N.G. Passalacqua, G. De Fine

Alchemilla exigua L. (Rosaceae)

+ **LAZ**: Settefrati (Frosinone), Santuario di Canneto (WGS84: 41.713970N, 13.902108E), pascolo in loc. Casale Bartolomucci, suolo calcareo, 1327 m, 22 July 2020, *G. Tondi*, *F. Minutillo* (FI, *Herb. Tondi*). – Species confirmed for the flora of Lazio.

This population represents the first record outside of Monti della Laga in the central Apennines (Di Pietro et al. 2015; Ballelli and Allegrezza 2016).

F. Minutillo, G. Tondi

Alchemilla fissa Günther & Schummel (Rosaceae)

+ **LAZ**: Accumoli (Rieti), Agro Nero (WGS84: 42.701884N, 13.323876E), sponde rocciose di ruscello, in radura nella faggeta di Pannicaro, presso Lago Secco, suolo marnoso-arenaceo, 1590 m, 30 May 1999, *G. Tondi* (FI). – Species new for the flora of Lazio.

F. Minutillo, G. Tondi

***Alchemilla subglobosa* C.G.Westerl. (Rosaceae)**

+ **MAR**: Monte Cavallo (Macerata), Monte Cetrognola (Riserva Statale Montagna di Torricchio) (WGS84: 42.96099269N, 13.00418242E), sotto nuclei di faggio e pascoli pingui adiacenti, substrato calcareo, 1350 m, 4 June 1987, *S. Ballelli* (FI; *Herb. Ballelli*; *Herb. Tondi*). – Species new for the flora of Marche.

This species shows its centre of distribution in northern and central Europe up to the Alps (Kurrto 2009). In Italy it is very rare and known only for few sites of the south Tyrolean and Trentino Alps (Pignatti et al. 2018; F. Festi pers. comm.).

S. Ballelli, G. Tondi

***Anemone apennina* L. (Ranunculaceae)**

– **PIE**. – Species to be excluded from the flora of Piemonte.

This species was first reported for Piemonte by Bellone et al. (2014) in two different localities in the Ligurian Alps: Limone Piemonte (Cuneo) and Frabosa Sottana (Cuneo). Recently, Bellone (2020) attributed the record from Limone Piemonte to *Anemone blanda* Schott & Kotschy, an allochthonous taxon originating from the Balkan peninsula, used for ornamental purposes. The specimen from Frabosa Sottana in TO must also be referred (revision by A. Selvaggi, 31 March 2021) to *A. blanda*, in accord with the keys proposed by Ziman et al. (2011) and Verloove (2017).

A. Selvaggi

***Apium graveolens* L. (Apiaceae)**

+ **SAR**: Status change from casual alien to native for the flora of Sardegna.

Apium graveolens is a Mediterranean species, whose presence is well documented in Sardegna (e.g., Moris 1840–1843; Milia and Mossa 1977; De Martis et al. 1984; De Martis and Loi 1989). It is common in moist places, swamps and riverbanks (Arrigoni 2013). Different horticultural varieties of this species are also widely cultivated as a vegetable . We speculate that the evaluation of its status as a casual alien may be derived from the interpretation of rarely occurring sub-spontaneous plants (Bacchetta 2006; Bacchetta et al. 2009). At any rate, its status is to be re-evaluated as a native to Sardegna.

M. Fois, L. Podda, G. Bacchetta

***Aristolochia pallida* Willd. (Aristolochiaceae)**

+ **PUG**: Gravina in Puglia (Bari), "Bosco Difesa Grande", nei pressi di Lago Splendore in bosco a *Quercus cerris* e *Q. frainetto* (WGS84: 40.765021N, 16.381718E), 462 m s.l.m., 25 April 2018, campione coltivato in Orto Botanico sino a 28 May 2021, leg. *G. Pazienza*, *L. Forte,* det. *G. Pazienza, L. Forte, V. Cavallaro* (FI; BI Nos 42445, 42448, 42449, 42450, 42451, 42452). – Species new for the flora of Puglia.

Aristolochia pallida is considered as erroneously recorded in Puglia by Bartolucci et al. (2018), where it was formerly reported by Pasquale and Licopoli (1873) for the

Gargano promontory at Sannicandro and by Palanza (1900) *"Nell'erboso sassoso del Pulicchio alle Murge di Gravina"*. The ecological conditions of this locality are similar to those reported for this species in Basilicata (Forte 2001; Pignatti et al. 2017).

G. Pazienza, L. Forte, V. Cavallaro

***Bromus chrysopogon* Viv. (Poaceae)**

+ **ITALIA** (**BAS**): Maratea (Potenza), litorale presso il porto (WGS84: ca. 39.989508N, 15.705615E), incolto litoraneo, ca. 10 m, no exp., 19 April 1990, leg. *E. Banfi*, det. *E. Banfi* 15 February 2021 (FI, MSNM sub *B. scoparius* No. 24034). – Species new for the flora of Italy (Basilicata).

+ **CAL**: Praia a Mare (Cosenza), spiaggia in faccia all'Isola di Dino (WGS84: ca. 39.873902N, 15.783107E), dune, ca. 2 m, no exp., 20 April 1990, leg. *E. Banfi*, det. *G. Osti & C. Acedo* June 2018 (FI, MSNM sub *B. scoparius* Nos. 24031, 24032, 24033, 24035). – Species new for the flora of Calabria.

Bromus chrysopogon is a southeastern-Mediterraean species described from Libya, absent in Morocco, Spain, France and the former-Yugoslavia (Clayton et al. 2006+; Valdés and Scholz 2009+), possibly native to Italy. Initially confused with *B. scoparius* L. with which it shares a compact ovoid to flabellate synflorescence, it stands out (Sherif and Siddiqi 1988) for the spikelets 20–25 mm long (vs. 8–20 mm), the lemmas 9.0–11.5 × 3.0–4.0 mm (vs. 7.0–8.0(–10.0) × 1.0–2.5 mm), the awn up to 15 mm (vs. 9(–12) mm), and the brownish-golden, never anthocyanic panicle.

E. Banfi, G. Galasso

***Bromus lepidus* Holmb. (Poaceae)**

+ C **LOM**: Magenta (Milano), Parco del Ticino, riserva "La Fagiana" (WGS84: 45.433122N, 8.829445E ± 400 m), margine di sentiero, ca. 100 m, no exp., 20 May 1993, leg. *G. Galasso*, det. *G. Osti & C. Acedo* June 2018 (MSNM sub *B. hordeaceus* No. 33852). – Cryptogenic species new for the flora of Lombardia.

Bromus lepidus is easy to identify for major lemmas shorter than 6.5 mm with a wide hyaline margin folded to an acute angle, and palea shorter than the caryopsis (Tison and de Foucault 2014). It had been reported for Italy (Piemonte and Lombardia) by Pignatti (1982), but without confirmation, and later excluded by the same author (Pignatti et al. 2017). It is impossible to evaluate if the species is native or alien to Lombardia, although in Trentino-Alto Adige it is considered a casual alien (Bartolucci et al. 2018).

E. Banfi, G. Galasso

***Carex buekii* Wimm. (Cyperaceae)**

+ **TOS**: Firenze (Firenze), Fiume Arno (WGS84: 43.765973N, 11.286693E), riva destra del fiume vicino all'Hotel "Ville sull'Arno", 10 May 2021, *L. Lastrucci* (FI). – New species for the flora of Toscana.

Carex buekii was reported as occurring only in Piemonte and doubtfully in Friuli Venezia Giulia (Bartolucci et al. 2018), where it has delimitation problems with the closely related *C. randalpina* B.Walln. (Koopman et al. 2018). This record represents the southernmost finding for Italy and the absolute southwestern limit for the range of this species (Koopman et al. 2018). In the collection site the species grows temporarily submerged.

L. Lastrucci, P. Jiménez-Mejías

***Carex strigosa* Huds. (Cyperaceae)**

+ **ABR**: Rocca S. Maria (Teramo), F.so Valle Castellana (WGS84: 42.701884N, 13.323876E), schiarita umida in faggeta mista, loc. La Piana, sotto Colle Romicito; suolo marnoso-arenaceo, 1550 m, 15 September 2017, *G. Tondi, F. Minutillo* (FI, *Herb. Tondi*). – Species new for the flora of Abruzzo.

F. Minutillo, G. Tondi

***Catapodium pauciflorum* (Merino) Brullo, Giusso, Miniss. & Spamp. (Poaceae)**

+ **LIG**: Bergeggi (Savona), "IT1323202 Isola Bergeggi - Punta Predani" presso Punta del Maiolo (WGS84: 44.2374N, 8.442402E), macchia mediterranea, substrato calcareo, 16 m, 15 May 2020, *D. Dagnino, L. Minuto* (GE No. 2408); Portovenere (La Spezia), "IT1345005 Portovenere - Riomaggiore - San Benedetto" Castello di Portovenere, (WGS84: 44.050324N, 9.832397E), gariga a *Euphorbia dendroides* (Habitat Natura 2000 cod.5330), 21 m, 8 May 2020, *D. Dagnino, C. Turcato* (GE No. 5055); Portovenere (La Spezia), "IT1345005 Portovenere - Riomaggiore - San Benedetto" Castello di Portovenere, (WGS84: 44.048553N, 9.833048E), tasca sabbiosa sulla scogliera calcarea, 2 m, 8 May 2020, *D. Dagnino, C. Turcato* (GE No. 5075). – Species confirmed for the flora of Liguria.

Several old records of *C. pauciflorum* for Liguria are known from Brullo et al. (2003), Ottone Penzig's handwritten notes found on a copy of De Notaris (1844) stored in the library of the University of Genova, and the GDOR herbarium (Barberis et al. 2019).

D. Dagnino, L. Minuto, C. Turcato

***Cistus albidus* L. (Cistaceae)**

+ **TOS**: Monte Argentario (Grosseto), fra Punta Avoltore e Punta di Torre Ciana, (WGS84: 42.370900N, 11.167933E), nella gariga bassa a erica multiflora e rosmarino, su breccia calcarea, 88 m, 27 December 2019 (sterile), *F. Selvi 4035* (FI); *ibidem*, 23 May 2020 (fruit), *F. Selvi* e *I. Bettarini 4036* (FI); *ibidem*, 6 April 2021 (flower), *F. Selvi* e *I. Bettarini 4044* (FI). – Species new for the flora of Toscana.

The native presence in Toscana was recently excluded (Bartolucci et al. 2016). In this new locality, *C. albidus* forms a very small population in a low garrigue with

Erica multiflora L. and *Salvia rosmarinus* Spenn., on a warm, dry slope facing to the south, on rocky-gravelly calcareous soil. This is the typical habitat of this species. It is not known as a cultivated ornamental in the area, supporting its native status in this locality. Searches in the surrounding area, however, were not successful. The population is in urgent need of protection, as plants are close to a dirt road and subject to a high risk of being collected or extirpated.

F. Selvi

***Cladanthus mixtus* (L.) Chevall. (Asteraceae)**

+ **LIG**: Vado Ligure (Savona), sulla sponda destra del Quiliano (WGS84: 44.280714N, 8.444769E), 0 m, 07 April 2021, *M. Callegari, B. Ciocia* (GE). – Species confirmed for the flora of Liguria.

Some historical herbarium specimens conserved in GDOR (Barberis et al. 2019) document the presence of the species in three localities: Voltri, Lagaccio, and Sarzana. Bibliographic data (Bertoloni 1853–1854; Ariello 1957) report the historical presence of this species in five other localities in the surroundings of La Spezia: Punta Mesco, Monterosso al Mare, Riomaggiore, Corniglia, and Canale Turì. The population consists of about ten individuals and some seedlings.

M. Callegari, B. Ciocia, G. Casazza, L. Minuto

***Convallaria majalis* L. (Asparagaceae)**

+ **UMB**: Costacciaro (Perugia), Monte Cucco, in Loc. Pignola (WGS84 43.366110N, 12.732120E), bosco misto su versante acclive con esposizione W, substrato carbonatico, c. 1050 m s.l.m., 30 May 2021, *A. Di Filippo, A. Scoppola* (UTV No. 38780). – Species confirmed for the flora of Umbria.

The species is reported as "doubtfully occurring" for Umbria (Bartolucci et al. 2018), although its presence was already reported for Monte Cucco in the sites Fosso di Musolea and Campo la Croce (Salerno and Puletti 1994, 1996), close to the site recorded here. This population is made up of clusters of a few dozen individuals, which 200–300 m upstream cover larger areas in the understory of a beech forest.

A. Di Filippo, A. Scoppola

***Crucianella angustifolia* L. (Rubiaceae)**

+ **VDA**: Quart (Aosta), tra l'oratorio Beato Emerico, Duclos e Porsod (WGS84: 45.757630N, 7.406327E), praterie xerotermiche, 950–1180 m s.l.m., 7 June 2021, *M. Lonati, A. Mainetti, S. Ravetto Enri* (FI). – Species confirmed for the flora of Valle d'Aosta.

This species was recorded by Braun-Blanquet (1961) based on specimens in MPU collected in the localities of Veynes/Sorreley (Saint-Christophe) in 1956. It has not been recently recorded for Valle d'Aosta, where it is actually considered as cryptogenic (Bovio 2014; Bartolucci et al. 2018). Dozens of individuals were sparsely distributed

over an area of about 10 hectares. Due to the species' abundance and distribution across the semi-natural xero-thermic grasslands of Quart, we believe it most appropriate to consider this species as native.

M. Lonati, A. Mainetti, S. Ravetto Enri

***Fedia graciliflora* Fisch. & C.A.Mey. (Caprifoliaceae)**

+ **LAZ**: Roma (Roma), Parco Petroselli (Talenti) (WGS84: 41.938009N, 12.557930E), pratello ai margini di un uliveto, lungo la rete di confine, suolo tufaceo, 37 m, 19 April 2019, *G. Tondi, G. Pellegrino* (FI, *Herb. Tondi*). – Species new for the flora of Lazio.

F. Minutillo, G. Tondi

***Helianthemum salicifolium* (L.) Mill. (Cistaceae)**

+ **LIG**: Diano San Pietro (Imperia), "IT1315602 Pizzo di Evigno" M. Lago (WGS84: 43.96365N, 8.06141E), prateria arida su substrato calcareo (Habitat Natura 2000 cod.6210*), facies densamente arbustata, 625 m, 25 May 2020, *D. Dagnino, M. Mariotti* (GE No. 2989). – Species confirmed for the flora of Liguria.

Some old records (De Notaris 1844; Bertoloni 1842–1844) and herbarium specimens housed in GDOR (Barberis et al. 2019) document the presence of this species in localities in the province of Savona (Albenga, Ceriale) and near Genova. According to Ottone Penzig's handwritten notes found on a copy of De Notaris (1844), stored in the library of the University of Genova, this species was also present at Capo Berta, an area close to the site of the current discovery.

D. Dagnino, M. Mariotti, I. Briozzo

***Hieracium pilosum* Schleich. ex Froel. subsp. *villosifolium* (Nägeli & Peter) Greuter (Asteraceae)**

+ **EMR**: Corniglio (Parma), tra il Lago Santo e La Sella del Marmagna (WGS84: 44.395387N, 10.000874E), prateria subalpina, 1700 m, 25 July 2020, leg. *L. Pinzani,* det. *G. Gottschlich* (FI). – Subspecies new for the flora of Emilia-Romagna.

L. Pinzani, G. Gottschlich

***Juncus ranarius* Songeon & E.P. Perrier (Juncaceae)**

+ **VEN**: Sopra Ruaz - Livinallongo (Belluno) (WSG84 46.496466N, 11.919887E), margine strada statale, 1400 m s.l.m., 4 August 2008, *S. e C. Argenti* (FI barcode FI064007, *Herb. Argenti* No. 16801). – New species for the flora of Veneto.

The distribution of *Juncus ranarius* in Italy was recently updated (Lastrucci et al. 2022), highlighting a certain ecological amplitude for this species. This record confirms the ability of *J. ranarius* to originate populations even in non-halophilic habitats.

L. Lastrucci, C. Argenti

***Lamium galeobdolon* (L.) L. subsp. *galeobdolon* (Lamiaceae)**

+ **LAZ**: Acquafondata (Frosinone) (WGS84: 41.514925N, 13.961504E), bosco di *Ostrya carpinifolia*, substrato calcareo, 990 m, 14 May 2016, *F. Minutillo* (FI, *Herb.* Minutillo, *Herb. Tondi*). – Subspecies new for the flora of Lazio.

F. Minutillo, G. Tondi

***Lolium arundinaceum* (Schreb.) Darbysh. subsp. *corsicum* (Hack.) J.-M.Tison (Poaceae)**

+ **SAR**: Perdu Locci, Pula (Sud Sardegna), prati umidi (WGS84: 38.995073N, 9.012160E), 1 m, 18 June 2021, *M. Fois, G. Bacchetta* (FI, CAG); Sa Giaga, Tula (Sassari), sponde sabbiose lacustri (WGS84: 40.762810N, 9.010656E), 164–165 m s.l.m., 16 June 2013, *G. Calvia* (*Herb. Calvia*). – Subspecies new for the flora of Sardegna.

Lolium arundinaceum subsp. *corsicum* is a perennial herb endemic to Corsica and Toscana (Bartolucci et al. 2018). This subspecies was doubtfully recorded for Sardegna, based on the synonymy with *Festuca arundinacea* var. *insularis* Gennari proposed by Banfi et al. (2017). We confirm its presence in several sub-halophilous wet meadows near the coast and inland plains of southern Sardegna, as well as in sandy and wet places of northern Sardegna.

M. Fois, G. Calvia, G. Bacchetta

***Ononis spinosa* L. subsp. *procurrens* (Wallr.) Briq. (Fabaceae)**

+ **LAZ**: Ostia Antica (Roma), scavi di Ostia Antica (WGS84: 41.753792N, 12.288327E), tra i ruderi, sul travertino, 5 m, 24 September 2019, *G. Tondi* (FI, *Herb. Tondi*). – Subspecies new for the flora of Lazio.

F. Minutillo, G. Tondi

***Pilosella fusca* (Vill.) Arv.-Touv. (Asteraceae)**

+ **LOM**: Sondalo (Sondrio), sentiero in Valle di Rezzalo, presso la chiesa di San Bernardo (WGS84: 46.35728N, 10.41861E), prateria alpina aperta di fondovalle, ca. 1850 m, 10 July 2005, leg. *S. Perego*, det. *G. Gottschlich* 2021 (MSNM No. 44104 sub *Hieracium aurantiacum*). – Species confirmed for the flora of Lombardia.

G. Gottschlich, G. Galasso

***Plantago atrata* Hoppe subsp. *fuscescens* (Jord.) Pilg. (Plantaginaceae)**

+ **TOS**: Coreglia Antelminelli (Lucca), M.te Rondinaio, sella sul crinale ad Est della vetta (WGS84: 44.114656N, 10.595474E), prateria altomontana, 1800 m, 8 July 2021, *L. Pinzani,* (FI, *Herb. Pinzani*). – Subspecies new for the flora of Toscana.

L. Pinzani

***Poa palustris* L. subsp. *palustris* (Poaceae)**

+ **LAZ**: Alvito (Frosinone), Valle di Rio, Font.na Lepore (WGS84: 41.745481N, 13.729308E), canale di scolo del fontanile, 847 m, 13 May 2021, *L. Cancellieri, G. Filibeck* (FI, *Herb. Cancellieri*); Vallerotonda (Frosinone), Valle Verrecchia, sotto Sorgente di Collelungo (WGS84: 41.624519N, 13.980796E), canale di scolo di fontanile, 1340 m, 4 June 2021, *G. Filibeck, G. Cangelmi* (*Herb. Cancellieri*); San Biagio Saracinisco (Frosinone), Valle Monacesca, Le Fontane (WGS84: 41.642979N, 13.960188E), torbiera, 1775 m, 20 July 2021, *L. Cancellieri, G. Cangelmi* (*Herb. Cancellieri*); Vallerotonda (Frosinone), ecotoni sopra loc. La Selva - Lago di Cardito (WGS84: 41.607930N, 13.989928E), boscaglia igrofila, suolo alluvionale a matrice calcarea, 1030 m, 22 June 2013, *G. Tondi, F. Minutillo* (FI, *Herb. Tondi*). – Species new for the flora of Lazio.

This species, previously overlooked, is quite common in wet habitats across a wide elevational range in SE-Lazio (Val Comino, Meta and Mainarde districts).

L. Cancellieri, G. Cangelmi, G. Filibeck, F. Minutillo, G. Tondi

+ **MOL**: Scapoli (Isernia), Colle Rotondo (WGS84: 41.617687N, 14.013347E), canale di scolo di fontanile, 1160 m, 8 July 2021, *L. Cancellieri, G. Cangelmi, G. Filibeck* (UTV). – Species confirmed for the flora of Molise.

L. Cancellieri, G. Cangelmi, G. Filibeck

***Polypogon monspeliensis* (L.) Desf. (Poaceae)**

+ **UMB**: Magione (Perugia), loc. Sant'Arcangelo sul Trasimeno (WGS84: 43.087983N, 12.156851E), vegetazione sinantropica delle canaline di scolo a bordo strada, 258 m, 16 June 2021, leg. *G. Mei*, det. *G. Mei, A. Stinca* (FI). – Species confirmed for the flora of Umbria.

G. Mei, A. Stinca

***Potamogeton coloratus* Hornem. (Potamogetonaceae)**

+ **LIG**: Genova (Genova), laghetti di Nervi (WGS84: 44.394861N, 9.045050E), pozza di torrente, 67 m, 26 January 2017, leg. *M. Calbi*, det. *G. Barberis, M. Calbi, D. Dagnino* (GE No. 5136); *ibidem*, 17 September 2020, leg. *V. Del Nero*, det. *G. Barberis, V. Del Nero, D. Dagnino* (GE No. 5185). – Species confirmed for the flora of Liguria.

De Notaris (1844, under the name *P. plantagineus* Du Croz ex Roem. & Schult.) quoted this species "in paludibus et in fossis secus litora Liguriae totius frequentissime", but in the 20th century almost all coastal wetlands disappeared.

G. Barberis, M. Calbi, V. Del Nero

***Pyrus nivalis* Jacq. (Rosaceae)**

+ **EMR**: Canossa (Reggio Emilia), ZSC "IT4030014 Rupe di Capotrera, Rossena", strada SP54 tra Ciano d'Enza e Rossena, dopo la curva al Km 2 (WGS84: 44.591183N,

10.417198E), boscaglia con *Quercus pubescens*, *Fraxinus ornus*, *Ulmus minor* e *Spartium junceum*, 347 m, NNE, 10 October 2020, leg. *G. Riva*, det. *E. Banfi* (FI, MSNM Nos. 50930, 50931, 50932). – Species new for the flora of Emilia-Romagna.

We found numerous 2–3 m tall shrubs of this species.

G. Riva, E. Banfi, G. Galasso

***Ranunculus baldensis* Dunkel (Ranunculaceae)**

+ **VEN**: Lusiana-Conco (Vicenza), loc. sopra Piazza Campana (WGS84: 45.793816N, 11.552451E), compluvio a margine boscaglia, 915 m, 4 May 2021, *leg. F. Fratolin*, *det. F.G. Dunkel* (FI, *Herb. Dunkel*, *Herb. Argenti*); *idem*, loc. presso Buso della Sperlonga (WGS84: 45.799687N, 11.550342E), margine ceduo, 1105 m, 4 Mai 2021, *leg. D. Campoccia, C. Argenti*, *det. F.G. Dunkel* (FI, *Herb. Dunkel*, *Herb. Argenti*); *idem*, loc. Ristoro (WGS84: 45.797986N, 11.545593E), compluvio a margine bosco, 1100 m, 4 Mai 2021, *leg. D. Campoccia, C. Argenti*, det. *F.G. Dunkel* (FI, *Herb. Dunkel*, *Herb. Argenti*). – Species confirmed for the flora of Veneto.

Ranunculus baldensis belongs to the *R. auricomus* L. complex and was described from Mt. Baldo in Trentino-Alto Adige. It was reported as probably extinct for Veneto (Dunkel 2010) based on a historical specimen kept at FI collected on M. Grappa by L. Vaccari in "Collalti, selve umide cedue di San Michele".

F.G. Dunkel, D. Campoccia, C. Argenti, F. Fratolin

***Ranunculus pedrottii* Spinosi ex Dunkel (Ranunculaceae)**

+ **LAZ:** Amatrice (Rieti), Fosso Cerruglia (WGS84: 42.588509N, 13.336007E), prati umidi, 1290 m, 8 May 2013, *F. Bartolucci, F. Conti* (APP Nos 52604, 52605, 52621–52624, 57186, 57195–57200); *ibidem*, 15 June 2012, *F. Bartolucci, F. Conti* (APP Nos 52645, 52648, 52649, 52651–52653); *ibidem*, 18 June 2016, *F. Conti* (APP Nos 57188–57190, 60271–60282); *ibidem*, 23 July 1997, *G. Tondi* (APP); *ibidem*, 14 June 1998, *G. Tondi* (APP). – Species new for the flora of Lazio.

The species was considered so far endemic to the high karstic plateaux around Castelluccio (Pian Grande di Castelluccio di Norcia and Pian Perduto) between Marche and Umbria (Dunkel 2011).

F. Conti, F. Bartolucci, F.G. Dunkel, G. Tondi

***Ranunculus rionii* Lagger (Ranunculaceae)**

+ **EMR**: Collecchio (Parma), quarry lake close to the Chiesuole Naturalistic Area (WGS84: 44.787751N, 10.208318E), 22 June 2021, leg. *R. Bolpagni, A. Dalla Vecchia,* det. *L. Lastrucci et R. Bolpagni* n. FI064048 (FI barcode FI064048). – Species new for the flora of Emilia-Romagna.

Ranunculus rionii grows along the shores of an abandoned quarry lake.

R. Bolpagni, A. Dalla Vecchia, L. Lastrucci

***Romulea columnae* Sebast. & Mauri (Iridaceae)**

+ **EMR**: San Leo (Rimini), propaggini occidentali di Monte Gregorio (WGS84: 43.912870N, 12.354773E), prato arido su substrato calcareo affiorante, 505 m s.l.m., 25 February 2021, *T. Bruschi, F. Santi* (FI); Cervia (Ravenna), radura prativa nella pineta (punto soggetto a calpestio), 27 March 1983, *F. Semprini* (*Herb. Semprini*). – Species new for the flora of Emilia-Romagna.

About 15 flowered individuals were observed in San Leo. This species was not recorded by Bruschi and Polverelli (2020), that studied the flora of this area.

T. Bruschi, F. Santi

***Rorippa sylvestris* (L.) Besser subsp. *sylvestris* (Brassicaceae)**

+ **CAL**: Sant'Eufemia d'Aspromonte (Reggio Calabria), Contrada San Bartolo (WGS84: 38.260484N, 15.843146E), lungo un'antica "saja" usata per irrigare i campi, 498 m, 8 July 2020, leg. *A. Crisafulli*; det. *A. Crisafulli, V.L.A. Laface, C.M. Musarella, G. Spampinato* (FI, REGGIO). – Species and subspecies confirmed for the flora of Calabria.

Rorippa sylvestris subsp. *sylvestris* is reported throughout Italy, with the exception of Calabria where, according to Bartolucci et al. (2018), the taxon is of doubtful occurrence. The collected individuals grow in large numbers along an old "saja" used to irrigate the nearby fields.

C.M. Musarella, V.L.A. Laface, G. Spampinato, A. Crisafulli

***Rosa rubiginosa* L. (Rosaceae)**

+ **MAR**: Bolognola (Macerata), siepi e radure nel vers. N-NW del M. Castel Manardo (WGS84: 42.979389N, 13.242039E), ca. 1430 m., 26 June 2021, *L. Gubellini* (FI, PESA). – Species new for the flora of Marche.

The species grows in hedges, clearings and wood edges at mountain altitudes.

L. Gubellini, N. Hofmann

***Sedum caeruleum* L. (Crassulaceae)**

+ **CAL**: Montebello Jonico (Reggio Calabria), Rocche di Prastarà (WGS84: 37.952121N, 15.745786E), rocce, 325 m, 2 May 2021, leg. *V.L.A. Laface*; det. *V.L.A. Laface, C.M. Musarella, G. Spampinato* (FI, REGGIO); Montebello Jonico (Reggio Calabria), Prastarà (WGS84: 37.951119N, 15.744581E), muro a secco, 292 m, 16 May 2021, leg. *V.L.A. Laface*; det. V.L.A. *Laface, C.M. Musarella, G. Spampinato* (REGGIO); Montebello Jonico (Reggio Calabria), Borgata Caracciolino (WGS84: 37.945481N, 15.749657E), bordo strada, 182 m, 16 May 2021, leg. *V.L.A. Laface*; det. *V.L.A. Laface, C.M. Musarella, G. Spampinato* (REGGIO); Montebello Joni-

co (Reggio Calabria), SS 106 (WGS84: 37.933378N, 15.735161E), bordo strada, 31 m, 16 May 2021, leg. *V.L.A. Laface*; det. *V.L.A. Laface, C.M. Musarella, G. Spampinato* (REGGIO); Montebello Jonico (Reggio Calabria), Contrada Tigani (WGS84: 37.934654N, 15.739465E), bordo strada, 63 m, 16 May 2021, leg. *V.L.A. Laface*; det. *V.L.A. Laface, C.M. Musarella, G. Spampinato* (REGGIO). – Species new for the flora of Calabria and for peninsular Italy.

The species grows abundantly on dry stone walls and along roadsides, and can also be found with numerous individuals in rocky plant communities occupied by *Lomelosia cretica* (L.) Greuter & Burdet. In Italy it was recorded so far only for Sicilia and Sardegna (Bartolucci et al. 2018).

C.M. Musarella, V.L.A. Laface, G. Spampinato

***Sedum dasyphyllum* L. subsp. *glanduliferum* (Guss.) Nyman (Crassulaceae)**

+ **UMB**: Spoleto (Perugia), Colle Sant'Elia, pareti rocciose sottostanti la Rocca Albornoziana (WGS84: 42.733744N, 12.742815E), affioramenti di natura carbonatica, 418 m s.l.m. , 7 May 2021, leg. et det. *F. Bonini*. – Subspecies new for the flora of Umbria.

Unlike other Italian administrative Regions, no information was available until now on the occurrence of *Sedum dasyphyllum* subspecies in Umbria (Bartolucci et al. 2018).

F. Bonini, D. Gigante

***Stellaria ruderalis* M.Lepší, P.Lepší, Z.Kaplan & P.Koutecký (Caryophyllaceae)**

+ **PIE**: San Pietro Val Lemina (Torino), lungo il greto del Torrente Lemina (WGS84: 44.897584N, 7.315345E), suolo prevalentemente sabbioso, 411 m, 16 July 2021, *S. Carfagno, M. Lonati* (FI). – Species new for the flora of Piemonte.

This recently described species has been already reported for Sardegna, Toscana, and Veneto (Lepší et al. 2019), and recently recorded also in Lombardia (Bartolucci et al. 2021).

S. Carfagno, M. Lonati

+ **TAA**: Tenno (Trento), alla base di un muro presso Ville del Monte, parcheggio all'inizio della strada per Canale di Tenno (WGS84: 45.930205N, 10.824805E), 560 m a.s.l., 23 March 2021, leg. *F. Prosser, G. Tomasi* (FI; ROV No. 76947); Via Dós Trento (Trento), a bordo strada (WGS84: 46.0728136N, 11.1096564E), 300 m a.s.l., 24 March 2021, leg. *G. Bonari, L. Sottovia* (ROV No. 80104); Bolzano (Bolzano), centro storico, Via A. Hofer, cortile del Museo di Scienze dell'Alto Adige (WGS84: 46.50114N, 11.357272E), 270 m a.s.l., 12 April 2021, leg. *T. Wilhalm* (BOZ). – Species new for the flora of Trentino-Alto Adige.

G. Tomasi, F. Prosser, T. Wilhalm, G. Bonari

***Trifolium michelianum* Savi (Fabaceae)**

+ **PUG**: Gravina in Puglia (Bari), Bosco Difesa Grande, Lago d'Olmo (WGS84: 40.755172N, 16.385009E), prati umidi su suoli periodicamente inondati, 450 m, 14 June 2019, *V. Tomaselli* (FI, BI Nos 42443, 42444, 42446 e 42447). – Species new for the flora of Puglia.

Trifolium michelianum is a Mediterranean-Atlantic species with isolated locations in North Africa, the Balkan Peninsula, and Asia Minor (Caldarella et al. 2013). In the localities of Puglia, it forms small populations, growing in wet and periodically flooded meadows.

V. Tomaselli, F. Carruggio, L. Forte

***Veronica cymbalaria* Bodard subsp. *cymbalaria* (Plantaginaceae)**

+ **PIE**: Alto (Cuneo), Valle Pennavaire (WGS84: 44.112460N, 7.996134E), ambiente ruderale nei pressi di una costruzione, 770 m, 23 April 2021, *M. Pittarello, G. Nota, D. Barberis* (FI). – Species confirmed for the flora of Piemonte.

Veronica cymbalaria was reported by Bertolani Marchetti (1955) for Valsesia, but recently was indicated as reported by mistake in Bartolucci et al. (2018).

M. Pittarello, G. Nota, D. Barberis

Floristic records of regional alien taxa

***Antirrhinum tortuosum* Bosc. ex Lam. (Plantaginaceae)**

+ (NAT) **LOM**: Bergamo (Bergamo), Via San Vigilio (WGS84: 45.710450N, 9.648429E), muro in pietra, 456 m, SW, 16 July 2021, *E. Banfi* (FI, MSNM No. 51025). – Naturalized regional alien species new for the flora of Lombardia.

This species was confused so far with *A. majus* L., also occasionally present on the walls of "Città Alta".

E. Banfi, G. Galasso

***Centranthus calcitrapae* (L.) Dufr. subsp. *calcitrapae* (Valerianaceae)**

+ (NAT) **VEN**: Domegliara (Verona), nello scalo merci della stazione ferroviaria (WGS84: 45.525713N, 10.821137E), massicciata, 117 m, 21 April 2021, *A. Bertolli, F. Prosser* (FI, ROV No. 80106); *ibidem*, 9 June 2021, *F. Prosser, G. Tomasi* (ROV No. 80108); Verona, nello scalo merci della stazione ferroviaria di Verona Porta Nuova (WGS84: 45.4251109N, 10.9813051E), massicciata, 63 m, 9 June 2021, *F. Prosser, G. Tomasi* (ROV No. 80109). – Naturalized regional alien species new for the flora of Veneto.

As far as northern Italy is concerned, this taxon was, so far, known only for Liguria and Lombardia (Bartolucci et al. 2020).

A. Bertolli, F. Festi, F. Prosser, G. Tomasi

***Crepis bursifolia* L. (Asteraceae)**

+ (NAT) **SAR**: Sassari (Sassari), Viale Italia, lungo la via principale e nelle vie traverse, in aiuole e bordi stradali (WGS84: 40.716621N, 8.554115E) 205 m, 7 June 2021, *G. Brundu, V. Lozano, S. Cherchi* (FI, *Herb. UniSS Agraria*). – Naturalized regional alien species new for the flora of Sardegna.

Crepis bursifolia is a perennial herb and a ruderal plant. In 2021, it was found to be abundant along the streets of the city center of Sassari. The record for Limbara by Veri and Bruno (1974) has been questioned by Calvia and Ruggero (2020).

V. Lozano, G. Brundu, S. Cherchi

***Euphorbia taurinensis* All. (Euphorbiaceae)**

+ (NAT) **TAA**: Mezzocorona (Trento), nella stazione ferroviaria (WGS84: 46.208705N, 11.129098E), massicciata, 210 m, 31 October 1999, leg. *F. Prosser,* det. *F. Prosser 11 May 2021* (ROV No. 32604, sterile plants); *ibidem*, 4 May 2021, leg. *F. Festi, M. Tognetti*, det. *F. Prosser 10 May 2021* (FI, ROV No. 80105, fertile plants). – Naturalized regional alien species new for the flora of Trentino-Alto Adige.

Euphorbia taurinensis was indicated as native in Piemonte and Liguria by Bartolucci et al. (2018). The species was also reported as alien for Veneto (Argenti and Lasen 2001), where it was observed in Feltre railway station between the 1970s and 1996.

A. Bertolli, F. Festi, F. Prosser, G. Tomasi

***Phalaris aquatica* L. (Poaceae)**

+ (NAT) **PIE**: Tortona (Alessandria), scarpata stradale della nuova tangenziale di Tortona (WGS84: 44.918263N, 8.886254E), 100 m, no exp., 22 June 2020, *S. Orsenigo* (PAV); *ibidem*, 21 May 2021, leg. *S. Orsenigo*, det. *S. Orsenigo* e *M. Pallanza* (FI, PAV). – Naturalized regional alien species new for the flora of Piemonte.

We have found about ten individuals, observed for four years, forming big tufts along the road margin, close to the railway.

S. Orsenigo, M. Pallanza

***Sedum caespitosum* (Cav.) DC. (Crassulaceae)**

+ (NAT) **VEN**: Sommacampagna (Verona), nell'Aeroporto Catullo (WGS84: 45.400643N, 10.891048E]), sede di stradina asfaltata dismessa, 75 m, 14 April 2021, *A. Bertolli, F. Prosser, G. Tomasi* (FI, ROV No. 80107). – Naturalized regional alien species new for the flora of Veneto.

This is a stenomediterranean species, known for southern and central Italy (Bartolucci et al. 2018), recently recorded for Emilia-Romagna (Alessandrini and Montanari 2020).

A. Bertolli, F. Festi, F. Prosser, G. Tomasi

Nomenclatural and distribution updates from other literature sources, and corrigenda

Nomenclatural and distribution updates, and corrigenda to Bartolucci et al. (2018) are provided in Suppl. material 1.

F. Bartolucci, G. Galasso

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Supplementary material 1

Supplementary data

Authors: Fabrizio Bartolucci, Gabriele Galasso

Data type: Species data

Explanation note: 1. Nomenclatural updates; 2. Note updates; 3. Distribution updates; 4. Synonyms, misapplied or included names.

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